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***** Welcome to STN International *****

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Jan 15 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3 Jan 18 ESTA has been reloaded and moves to weekly updates
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NEWS 5 Feb 14 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6 Mar 04 Gene Names now available in BIOSIS
NEWS 7 Mar 11 TOXLIT no longer available
NEWS 8 Mar 11 TROTHERMO no longer available
NEWS 9 Mar 14 US Provisional Priorities searched with P in CAPLUS and USPAFULL
NEWS 10 Mar 18 LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11 Apr 01 PAPERCHEM no longer available in STN. Use PAPERCHEM2 instead.
NEWS 12 Apr 01 "Ask CAS" for self-help around the clock
NEWS 13 Apr 01 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14 Apr 01 ZOE will be removed from STN
NEWS 15 Apr 14 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 16 Apr 14 Records from IP.com available in CAPLUS, SCAPLUS, and ZCAPLUS
NEWS 17 Apr 17 BIOSIS Gene Names now available in TOXCENTER
NEWS 18 Apr 21 Federal Research in Progress (FEDRIP) now available
NEWS 19 May 01 EOCIFULL to be reloaded. File temporarily unavailable.
NEWS 20 Jun 03 New e-mail delivery for search results now available

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0a,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 01 FEBRUARY 2002.
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FILE 'HOME' ENTERED AT 05:33:04 ON 01 JUN 2002

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

1.21

FILE 'REGISTRY' ENTERED AT 08:33:41 ON 14 JUN 2002

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STRUCTURE FILE UPDATES: 2 JUN 2001 HIGHEST EN 404787-52-0
DICTIONARY FILE UPDATES: 2 JUN 2001 HIGHEST EN 404787-52-0

TDCA INFORMATION NOW CURRENT THROUGH January 3, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 17, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN_STNOTES/stnotes17.pdf

=> e aluminum gallium nitride for

```

E1      1      ALUMINUM GALLIUM NICKEL SILICON HYDROXIDE OXIDE/CN
E2      1      ALUMINUM GALLIUM NICKELIUM NITRIDE (Al0.1Ga0.3Nb0.02N)/CN
E3      0 --- ALUMINUM GALLIUM NITRIDE/CN
E4      1      ALUMINUM GALLIUM NITRIDE (AL,GALN)/CN
E5      1      ALUMINUM GALLIUM NITRIDE (Al0-0.01Ga1.99-1N)/CN
E6      1      ALUMINUM GALLIUM NITRIDE (Al0-0.04Ga1.96-1N)/CN
E7      1      ALUMINUM GALLIUM NITRIDE (Al0-0.1Ga1.96-1N)/CN
E8      1      ALUMINUM GALLIUM NITRIDE (Al0-0.18Ga1.87-1N)/CN
E9      1      ALUMINUM GALLIUM NITRIDE (Al0-0.18Ga1.86-1N)/CN
E10     1      ALUMINUM GALLIUM NITRIDE (Al0-0.18Ga1.84-1N)/CN
E11     1      ALUMINUM GALLIUM NITRIDE (Al0-0.18Ga1.83-1N)/CN
E12     1      ALUMINUM GALLIUM NITRIDE (Al0-0.18Ga1.9-1N)/CN

```

=> s e4

E1 1 "ALUMINUM GALLIUM NITRIDE ((AL,GALN))" CN

=> a 11

E1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

EN 106097-44-3 REGISTRY

EN **Aluminum gallium nitride ((Al,Ga)N) (9CI)** CA INDEX NAME)

OTHER NAMES:

CN Aluminum gallium nitride (Al0-1Ga1-1N)

MF Al . Ga . N

AF Al0-1 Ga0-1 N

CI TIS

SR CA

ST STN Files: CA, CAPLUS, TOXCENTER, USPAT1, USPATFULL

Component	Ratio	Component	Registry Number
N	1		17875-55-3
Ga	0 - 1		7440-55-3
Al	0 - 1		7429-91-3

2296 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2313 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

9.38

9.59

FILE 'CAPLUS' ENTERED AT 09:39:37 ON 04 JUN 2002
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FILE COVERS 1907 - 4 Jun 2002 VOL 136 ISS 23
FILE LAST UPDATED: 2 Jun 2002 (10020602/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SPI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (LFI field) in this file.

=> s 11

L1 13303 L1

=> s epitaxial growth

69109 EPITAXIAL

(EPITAXIAL OF EPITAXIALS)

991166 GROWTH

(GROWTH OF GROWTHS)

L2 14818 EPITAXIAL GROWTH

(EPITAXIAL (W)GROWTH)

=> s 12 and 13

L4 66 L2 AND L3

=> d 14 1-1 abik abs

L1 ANSWER 1 OF 66 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1002:261146 CAPLUS

DOCUMENT NUMBER: 136:333314

TITLE: Gas source molecular beam epitaxy of high quality AlGaIn on Si and sapphire

AUTHOR(S): Nikishin, S.; Kipshidze, G.; Kuryatkov, V.; Zubrilov, A.; Choi, K.; Gherasoiu, I.; Grave de Peralta, L.; Prokofyeva, T.; Holtz, M.; Asomoza, R.; Kudryavtsev, I.; Temkin, H.

ORGANATE SOURCE: Department of Electrical Engineering, Texas Tech University, Lubbock, TX, 79401, USA

SOURCE: Materials Research Society Symposium Proceedings (2001), 639(GaN and Related Alloys--2000), G11.37/1-G11.37/6

CODEN: MRSPOE; ISSN: 0272-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We report the results of **epitaxial growth** expts. on

Al_xGa_{1-x}N (0.1 to eq. x 0.1 to eq. 1) on Si(111) and sapphire substrates aimed at understanding the origin and elimination of cracking. We describe growth procedures resulting in thick layers of Al_xGa_{1-x}N, grown by gas source mol. beam epitaxy with ammonia, that are free of cracks. In GaN layers with the thickness of approx. 2.5 μm, we find the background electron concn. of (1-2).times.10¹⁶ cm⁻³ and mobility of (800.+-100) cm²/Vs. In Al_xGa_{1-x}N (0.1 < x < 0.6) with the film thickness of 0.5-0.7 μm, the electron concn. of (1-2).times.10¹⁶ cm⁻³ is obtained. Low background concns. in GaN allow for formation of p-n junctions by doping with Mg. Light emitting diodes with the peak emission at 380 nm have been demonstrated.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 66 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:161119 CAPLUS

DOCUMENT NUMBER: 136:347361

TITLE: AC operation of GaN:Er thin film electroluminescent display devices

AUTHOR(S): Heikenfeld, J.; Steckl, A. J.

CORPORATE SOURCE: Nanoelectronics Laboratory, University of Cincinnati, Cincinnati, OH, 45221-0030, USA

SOURCE: Materials Research Society Symposium Proceedings (2001), 619(GaN and Related Alloys--2000), 619.4/1-619.4/6
CODEN: MRSFDD; ISSN: 0270-9172

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thin-film electroluminescence was obtained from GaN:Er deposited directly on amorphous dielec. layers. Electroluminescent device (ELD) structures consisting of a dielec./GaN/dielec. were formed on p+-Si substrates. In contrast to previous GaN:Er ELDs which used **epitaxial growth** conditions on cryst. substrates and were operated under d.c. bias, these ELDs were operated under a.c. bias. A max. luminance value of 100, 60, and 15 cd/m² was achieved from GaN:Er and AlGaN:Er AC-ELDs biased at 130 V and 130, 10, and 1 kHz, resp. The emission spectra, which originate from Er3+ 4f-4f transitions, consist of dominant visible emission at approx. 637/645 nm and IR emission at 1.5 μm. A violet emission peak at 415 nm indicates that hot carriers can gain up to approx. 3 eV energy for an applied voltage corresponding to 1.5 MV/cm applied field. The emitted intensity initially increases linearly with frequency, followed by a trend towards satn. The frequency for 3 dB redn. from the linear relation is at approx. 65 kHz for visible emission and approx. 8 kHz for IR emission. The satn. trends can be explained in terms of the spontaneous emission lifetimes of the visible (approx. 10 μs) and IR (approx. 1ms) Er3+ emissions.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

* file rex

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

14.17

21.76

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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-1.24

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DICTIONARY FILE UPDATES: 2 JUN 2002 HIGHEST RN 424787-52-0

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

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Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his

(FILE 'HOME' ENTERED AT 08:31:04 ON 04 JUN 2002)

FILE 'REGISTRY' ENTERED AT 08:33:41 ON 04 JUN 2002

E ALUMINUM GALLIUM NITRIDE/CN

L1 1 S E4

FILE 'CAPLUS' ENTERED AT 08:39:37 ON 04 JUN 2002

L2 2318 S L1

L3 19818 S EPITAXIAL GROWTH

L4 66 S L1 AND L3

FILE 'REGISTRY' ENTERED AT 08:49:11 ON 04 JUN 2002

=> e aluminum gallium nitride/cn

E1 1 ALUMINUM GALLIUM NICKEL SILICON HYDROXIDE OXIDE/CN
E2 1 ALUMINUM GALLIUM NIOBIUM NITRIDE (AL0.1GA0.34NB0.02N)/CN
E3 0 --> ALUMINUM GALLIUM NITRIDE/CN
E4 1 ALUMINUM GALLIUM NITRIDE (AL0.1GA0)/CN
E5 1 ALUMINUM GALLIUM NITRIDE (AL0-0.11GA0.99-1H)/CN
E6 1 ALUMINUM GALLIUM NITRIDE (AL0-0.15GA0.94-1H)/CN
E7 1 ALUMINUM GALLIUM NITRIDE (AL0-0.13GA0.86-1H)/CN
E8 1 ALUMINUM GALLIUM NITRIDE (AL0-0.13GA0.87-1H)/CN
E9 1 ALUMINUM GALLIUM NITRIDE (AL0-0.14GA0.86-1H)/CN
E10 1 ALUMINUM GALLIUM NITRIDE (AL0-0.16GA0.84-1H)/CN
E11 1 ALUMINUM GALLIUM NITRIDE (AL0-0.17GA0.83-1H)/CN
E12 1 ALUMINUM GALLIUM NITRIDE (AL0-0.18GA0.8-1H)/CN

=> e

E13 1 ALUMINUM GALLIUM NITRIDE (AL0-0.11GA0.74-1H)/CN
E14 1 ALUMINUM GALLIUM NITRIDE (AL0-0.15GA0.75-1H)/CN
E15 1 ALUMINUM GALLIUM NITRIDE (AL0-0.18GA0.7-1H)/CN
E16 1 ALUMINUM GALLIUM NITRIDE (AL0-0.15GA0.65-1H)/CN
E17 1 ALUMINUM GALLIUM NITRIDE (AL0-0.13GA0.7-1H)/CN
E18 1 ALUMINUM GALLIUM NITRIDE (AL0-0.45GA0.55-1H)/CN
E19 1 ALUMINUM GALLIUM NITRIDE (AL0-0.4GA0.6-1H)/CN
E20 1 ALUMINUM GALLIUM NITRIDE (AL0-0.5GA0.5-1H)/CN
E21 1 ALUMINUM GALLIUM NITRIDE (AL0-0.6GA0.4-1H)/CN
E22 1 ALUMINUM GALLIUM NITRIDE (AL0-0.7GA0.3-1H)/CN
E23 1 ALUMINUM GALLIUM NITRIDE (AL0-1GA0-1H)/CN
E24 1 ALUMINUM GALLIUM NITRIDE (AL0.01GA0.49H)/CN

=> e

E25 1 ALUMINUM GALLIUM NITRIDE (AL0.02-1GA0-0.99H)/CN
E26 1 ALUMINUM GALLIUM NITRIDE (AL0.01GA0.98H)/CN
E27 1 ALUMINUM GALLIUM NITRIDE (AL0.03GA0.97H)/CN
E28 1 ALUMINUM GALLIUM NITRIDE (AL0.04-0.13GA0.87-0.96N)/CN

E29	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.04-0.26GA0.8-0.96N)/CN
E30	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.04GA0.96N)/CN
E31	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.05-0.15GA0.85-0.95N)/CN
E32	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.05-0.15GA0.85-0.95N)/CN
E33	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.05-0.15GA0.85-0.95N)/CN
E34	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.05-0.15GA0.85-0.95N)/CN
E35	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.05-0.15GA0.85-0.95N)/CN
E36	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.05-0.15GA0.85-0.95N)/CN

= e

E37	1	ALUMINUM	GALLIUM	NITRIDE	AL0.05GA0.95N)/CN
E38	1	ALUMINUM	GALLIUM	NITRIDE	AL0.05-0.15GA0.92-0.94N)/CN
E39	1	ALUMINUM	GALLIUM	NITRIDE	AL0.05GA0.94N)/CN
E40	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.07-0.13GA0.9-0.93N)/CN
E41	1	ALUMINUM	GALLIUM	NITRIDE	AL0.07-0.13GA0.9-0.93N)/CN
E42	1	ALUMINUM	GALLIUM	NITRIDE	AL0.07-0.13GA0.9-0.93N)/CN
E43	1	ALUMINUM	GALLIUM	NITRIDE	AL0.07GA0.93N)/CN
E44	1	ALUMINUM	GALLIUM	NITRIDE	AL0.08-0.12GA0.88-0.92N)/CN
E45	1	ALUMINUM	GALLIUM	NITRIDE	AL0.08-0.12GA0.88-0.92N)/CN
E46	1	ALUMINUM	GALLIUM	NITRIDE	AL0.08-0.12GA0.88-0.92N)/CN
E47	1	ALUMINUM	GALLIUM	NITRIDE	AL0.08GA0.92N)/CN
E48	1	ALUMINUM	GALLIUM	NITRIDE	AL0.08-0.12GA0.88-0.92N)/CN

= e

E49	1	ALUMINUM	GALLIUM	NITRIDE	AL0.08-0.12GA0.88-0.92N)/CN
E50	1	ALUMINUM	GALLIUM	NITRIDE	AL0.08GA0.92N)/CN
E51	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.1-0.2GA0.8-0.9N)/CN
E52	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.1-0.2GA0.8-0.9N)/CN
E53	1	ALUMINUM	GALLIUM	NITRIDE	AL0.1-0.2GA0.8-0.9N)/CN
E54	1	ALUMINUM	GALLIUM	NITRIDE	AL0.1-0.2GA0.8-0.9N)/CN
E55	1	ALUMINUM	GALLIUM	NITRIDE	AL0.1-0.2GA0.84-0.9N)/CN
E56	1	ALUMINUM	GALLIUM	NITRIDE	AL0.1-0.2GA0.8-0.9N)/CN
E57	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.1-0.2GA0.8-0.9N)/CN
E58	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.1-0.2GA0.8-0.9N)/CN
E59	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.1-0.2GA0.8-0.9N)/CN
E60	1	ALUMINUM	GALLIUM	NITRIDE	AL0.1-0.2GA0.8-0.9N)/CN

= e

E61	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN
E62	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN
E63	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.15-0.17GA0.83-0.86N)/CN
E64	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN
E65	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15-0.15GA0.85-0.85N)/CN
E66	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15-0.15GA0.85-0.85N)/CN
E67	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN
E68	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.84N)/CN
E69	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN
E70	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN
E71	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN
E72	1	ALUMINUM	GALLIUM	NITRIDE	AL0.15GA0.85N)/CN

= e

E73	1	ALUMINUM	GALLIUM	NITRIDE	(AL0.2-0.6GA0.4-0.8N)/CN
E74	1	ALUMINUM	GALLIUM	NITRIDE	AL0.2-0.6GA0.4-0.8N)/CN
E75	1	ALUMINUM	GALLIUM	NITRIDE	AL0.21GA0.79N)/CN
E76	1	ALUMINUM	GALLIUM	NITRIDE	AL0.21GA0.79N)/CN
E77	1	ALUMINUM	GALLIUM	NITRIDE	AL0.23GA0.77N)/CN
E78	1	ALUMINUM	GALLIUM	NITRIDE	AL0.24GA0.76N)/CN
E79	1	ALUMINUM	GALLIUM	NITRIDE	AL0.25-0.95GA0.92-0.75N)/CN
E80	1	ALUMINUM	GALLIUM	NITRIDE	AL0.25GA0.75N)/CN
E81	1	ALUMINUM	GALLIUM	NITRIDE	AL0.26GA0.74N)/CN
E82	1	ALUMINUM	GALLIUM	NITRIDE	AL0.27GA0.73N)/CN
E83	1	ALUMINUM	GALLIUM	NITRIDE	AL0.28GA0.72N)/CN
E84	1	ALUMINUM	GALLIUM	NITRIDE	AL0.29GA0.71N)/CN

= 0.2

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E97	1	ALUMINUM GALLIUM NITRIDE	(AL0.31GA0.6N)/CN
E98	1	ALUMINUM GALLIUM NITRIDE	(AL0.32GA0.6N)/CN
E99	1	ALUMINUM GALLIUM NITRIDE	(AL0.33GA0.6N)/CN
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E01	1	ALUMINUM GALLIUM NITRIDE	(AL0.35GA0.6N)/CN
E02	1	ALUMINUM GALLIUM NITRIDE	(AL0.36-0.42GA0.56-0.64N)/CN
E03	1	ALUMINUM GALLIUM NITRIDE	(AL0.36GA0.6N)/CN
E04	1	ALUMINUM GALLIUM NITRIDE	(AL0.37GA0.6N)/CN
E05	1	ALUMINUM GALLIUM NITRIDE	(AL0.38GA0.6N)/CN
E06	1	ALUMINUM GALLIUM NITRIDE	(AL0.39GA0.6N)/CN

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E100	1	ALUMINUM GALLIUM NITRIDE	(AL0.42GA0.5N)/CN
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E102	1	ALUMINUM GALLIUM NITRIDE	(AL0.44GA0.5N)/CN
E103	1	ALUMINUM GALLIUM NITRIDE	(AL0.45-0.85GA0.15-0.55N)/CN
E104	1	ALUMINUM GALLIUM NITRIDE	(AL0.45GA0.5N)/CN
E105	1	ALUMINUM GALLIUM NITRIDE	(AL0.46GA0.5N)/CN
E106	1	ALUMINUM GALLIUM NITRIDE	(AL0.47GA0.5N)/CN
E107	1	ALUMINUM GALLIUM NITRIDE	(AL0.48GA0.5N)/CN
E108	1	ALUMINUM GALLIUM NITRIDE	(AL0.49GA0.5N)/CN

= 0.4

E109	1	ALUMINUM GALLIUM NITRIDE	(AL0.4GA0.6N)/CN
E110	1	ALUMINUM GALLIUM NITRIDE	(AL0.5-1GA0-0.5N)/CN
E111	1	ALUMINUM GALLIUM NITRIDE	(AL0.51-1GA0-0.49N)/CN
E112	1	ALUMINUM GALLIUM NITRIDE	(AL0.51GA0.4N)/CN
E113	1	ALUMINUM GALLIUM NITRIDE	(AL0.52GA0.4N)/CN
E114	1	ALUMINUM GALLIUM NITRIDE	(AL0.53GA0.4N)/CN
E115	1	ALUMINUM GALLIUM NITRIDE	(AL0.54GA0.4N)/CN
E116	1	ALUMINUM GALLIUM NITRIDE	(AL0.55GA0.4N)/CN
E117	1	ALUMINUM GALLIUM NITRIDE	(AL0.56GA0.4N)/CN
E118	1	ALUMINUM GALLIUM NITRIDE	(AL0.57GA0.4N)/CN
E119	1	ALUMINUM GALLIUM NITRIDE	(AL0.58GA0.4N)/CN
E120	1	ALUMINUM GALLIUM NITRIDE	(AL0.59GA0.4N)/CN

= 0.5

E121	1	ALUMINUM GALLIUM NITRIDE	(AL0.5GA0.5N)/CN
E122	1	ALUMINUM GALLIUM NITRIDE	(AL0.6-0.65GA0.35-0.4N)/CN
E123	1	ALUMINUM GALLIUM NITRIDE	(AL0.61GA0.3N)/CN
E124	1	ALUMINUM GALLIUM NITRIDE	(AL0.62GA0.3N)/CN
E125	1	ALUMINUM GALLIUM NITRIDE	(AL0.63GA0.3N)/CN
E126	1	ALUMINUM GALLIUM NITRIDE	(AL0.64GA0.3N)/CN
E127	1	ALUMINUM GALLIUM NITRIDE	(AL0.65GA0.3N)/CN
E128	1	ALUMINUM GALLIUM NITRIDE	(AL0.66GA0.3N)/CN
E129	1	ALUMINUM GALLIUM NITRIDE	(AL0.67GA0.3N)/CN
E130	1	ALUMINUM GALLIUM NITRIDE	(AL0.68GA0.3N)/CN
E131	1	ALUMINUM GALLIUM NITRIDE	(AL0.69GA0.3N)/CN
E132	1	ALUMINUM GALLIUM NITRIDE	(AL0.6GA0.4N)/CN

= 0.6

E133	1	ALUMINUM GALLIUM NITRIDE	(AL0.7-1GA0-0.3N)/CN
E134	1	ALUMINUM GALLIUM NITRIDE	(AL0.71GA0.2N)/CN
E135	1	ALUMINUM GALLIUM NITRIDE	(AL0.72GA0.2N)/CN
E136	1	ALUMINUM GALLIUM NITRIDE	(AL0.73GA0.2N)/CN
E137	1	ALUMINUM GALLIUM NITRIDE	(AL0.74GA0.2N)/CN
E138	1	ALUMINUM GALLIUM NITRIDE	(AL0.76GA0.24N)/CN

E139	1	ALUMINUM GALLIUM NITRIDE (AL0.77GA0.22N)/CN
E140	1	ALUMINUM GALLIUM NITRIDE (AL0.75GA0.25N)/CN
E141	1	ALUMINUM GALLIUM NITRIDE (AL0.79GA0.21N)/CN
E142	1	ALUMINUM GALLIUM NITRIDE (AL0.76GA0.24N)/CN
E143	1	ALUMINUM GALLIUM NITRIDE (AL0.8-0.26GA0.14-0.2N)/CN
E144	1	ALUMINUM GALLIUM NITRIDE (AL0.81GA0.19N)/CN
=0.2		
E145	1	ALUMINUM GALLIUM NITRIDE (AL0.84GA0.16N)/CN
E146	1	ALUMINUM GALLIUM NITRIDE (AL0.84GA0.16N)/CN
E147	1	ALUMINUM GALLIUM NITRIDE (AL0.85-0.36GA0.65-0.15N)/CN
E148	1	ALUMINUM GALLIUM NITRIDE (AL0.88-0.36GA0.1-0.15N)/CN
E149	1	ALUMINUM GALLIUM NITRIDE (AL0.85GA0.15N)/CN
E150	1	ALUMINUM GALLIUM NITRIDE (AL0.86GA0.14N)/CN
E151	1	ALUMINUM GALLIUM NITRIDE (AL0.87GA0.13N)/CN
E152	1	ALUMINUM GALLIUM NITRIDE (AL0.88GA0.12N)/CN
E153	1	ALUMINUM GALLIUM NITRIDE (AL0.89GA0.11N)/CN
E154	1	ALUMINUM GALLIUM NITRIDE (AL0.89GA0.11N)/CN
E155	1	ALUMINUM GALLIUM NITRIDE (AL0.90GA0.10N)/CN
E156	1	ALUMINUM GALLIUM NITRIDE (AL0.94GA0.06N)/CN
=0.2		
E157	1	ALUMINUM GALLIUM NITRIDE (AL0.95GA0.05N)/CN
E158	1	ALUMINUM GALLIUM NITRIDE (AL0.96GA0.04N)/CN
E159	1	ALUMINUM GALLIUM NITRIDE (AL0.97GA0.03N)/CN
E160	1	ALUMINUM GALLIUM NITRIDE (AL0.98GA0.02N)/CN
E161	1	ALUMINUM GALLIUM NITRIDE (AL0.99GA0.01N)/CN
E162	1	ALUMINUM GALLIUM NITRIDE (AL0.99GA0.01N)/CN
E163	1	ALUMINUM GALLIUM NITRIDE (ALGA15N2)/CN
E164	1	ALUMINUM GALLIUM NITRIDE (ALGAN2)/CN
E165	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL,GA,N,P)/CN
E166	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL,GA,N,P)/CN
E167	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL,GA,N,P,0.8-1P-0.2)/CN
E168	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.11GA0.99N0.92P0.08)/CN
=0.2		
E169	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.11GA0.99N0.92P0.08)/CN
E170	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.99N0.87P0.12)/CN
E171	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.97N0.87P0.02)/CN
E172	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.98N0.83P0.09)/CN
E173	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.88N0.71P0.98)/CN
E174	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.88N0.85P0.01)/CN
E175	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.9N0.94P0.06)/CN
E176	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.9N0.96P0.01)/CN
E177	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.8N0.96P0.04)/CN
E178	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.8N0.99P0.1)/CN
E179	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.13GA0.7N0.95P0.02)/CN
E180	1	ALUMINUM GALLIUM NITRIDE PHOSPHIDE (AL0.14GA0.6N0.95P0.02)/CN

=0.3 e1-164

L5 161 ("ALUMINUM GALLIUM NICKEL SILICON HYDROXIDE OXIDE"/CN OR "ALUMINUM GALLIUM NIOBIUM NITRIDE (AL0.16GA0.84NB0.1N)/CN OR "ALUMINUM GALLIUM NITRIDE (AL,GA,N)/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.06GA0.94-1N)/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.06GA0.94-1N)/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.12GA0.88-1N)/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.13GA0.87-1N)/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.14GA

0.36-1N)"/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.16GA0.34-1N)"/C
 N OF "ALUMINUM GALLIUM NITRIDE (AL0-0.17GA0.83-1N)"/CN OR "ALUMI
 NUM GALLIUM NITRIDE (AL0-0.1GA0.9-1N)"/CN OR "ALUMINUM GALLIUM
 NITRIDE (AL0-1.22GA0.78-1N)"/CN OR "ALUMINUM GALLIUM NITRIDE
 (AL0-0.25GA0.75-1N)"/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.2GA0
 .8-1N)"/CN OR "ALUMINUM GALLIUM NITRIDE (AL0-0.33GA0.65-1N)"/CN
 OF "ALUMINUM GALLIUM NITRIDE (AL0-0.3GA0.7-1N)"/CN OR "ALUMINUM
 GALLIUM NITRIDE (AL0-0.43GA0.55-1N)"/CN OR "ALUMINUM GALLIUM
 NITRIDE (AL0-0.4GA0.6-1N)"/CN OF "ALUMI

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(FILE 'HOME' ENTERED AT 08:33:04 ON 04 JUN 2002)

FILE 'REGISTRY' ENTERED AT 08:33:41 ON 04 JUN 2002

E ALUMINUM GALLIUM NITRIDE/CN

L1

1 S E4

FILE 'CAPLUS' ENTERED AT 08:39:37 ON 04 JUN 2002

L

2313 S L1

L2

19613 S EPITAXIAL GROWTH

L4

46 S L2 AND L3

FILE 'REGISTRY' ENTERED AT 08:49:11 ON 04 JUN 2002

E ALUMINUM GALLIUM NITRIDE CN

L2

161 S E1-164

FILE 'CAPLUS' ENTERED AT 13:13:14 ON 04 JUN 2002

=> s 15

L6 4473 L5

=> s 16 and 13

L7 103 L6 AND L3

=> d scan

L7 103 ANSWERS CAPLUS COPYRIGHT 2002 ACS

CC 76-3 (Electric Phenomena)

Section cross-reference(s): 75

TI Growth of gallium nitride and aluminum gallium nitride thin films using conventional and pendeo-**epitaxial growth** processes on 6H-silicon carbide (0001) and silicon(111) substrates

ST aluminum gallium nitride heterostructure silicon carbide

IT Heterojunction semiconductor devices

Growth of GaN and (Al,Ga)N thin films using conventional and pendeo-**epitaxial growth** processes on (0001)6H-SiC and (111)Si substrates for)

IT 409-41-3, Silicon monocarbide, processes 25617-97-4, Gallium nitride (GaN) **106097-44-3**, Aluminum gallium nitride Al_{0.1}Ga_{0.9}N

FL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

Growth of GaN and (Al,Ga)N thin films using conventional and pendeo-**epitaxial growth** processes on (0001)6H-SiC and (111)Si substrates)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L7 103 ANSWERS CAPLUS COPYRIGHT 2002 ACS

CC 76-3 (Electric Phenomena)

ISS: H01L031-0323; H01L031-0336; H01L031-072; H01L031-109; H01L021-3209; H01L021-4763

NCL 256011000

CC 76-3 (Electric Phenomena)

TI Design and fabrication of a GaN field-effect transistor and an inverter device

ST semiconductor device fabrication gallium nitride field effect transistor inverter

IT Doping

Electron acceptors

Electron donors

Epitaxy

Field effect transistors

Inverters

Ion implantation

MISFET (transistors)

Semiconductor device fabrication

Semiconductor heterojunctions

Design and fabrication of a GaN field-effect transistor and inverter device)

IT 243 4-10-5, Aluminum nitride 25617-97-4, Gallium nitride (GaN)

106097-44-3, Aluminum gallium nitride ((Al,Ga)N)

FL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

Design and fabrication of a GaN field-effect transistor and inverter device)

IT 7440-45-4, Magnesium, uses 7440-44-0, Carbon, uses 7440-66-6, Zinc, uses

FL: MFA (Modifier or additive use); USES (Uses)

Design and fabrication of a GaN field-effect transistor and inverter device)

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17 ANSWER 1 OF 103 CAPLUS COPYRIGHT 2002 ACS
 AU 1002:261146 CAPLUS
 IN 136:131314
 TI Gas source molecular beam epitaxy of high quality AlGaIn on Si and sapphire
 AU Nikishin, S.; Kipshidze, S.; Kuryatkov, V.; Zubrilov, A.; Choi, K.;
 Gheraschiu, Iu.; Grava de Peralta, L.; Prokofyeva, T.; Holtz, M.; Asomoza,
 R.; Kudryavtsev, Ya.; Temkin, H.
 SS Department of Electrical Engineering, Texas Tech University, Lubbock, TX,
 79401, USA
 SO Materials Research Society Symposium Proceedings (2001), 639(GaN and
 Related Alloys--2000), G11.37/1-G11.37/6
 CODEN: MRSPOH; ISSN: 0272-9172
 EB Materials Research Society
 J7 Journal
 LA English
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